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ABSTRACT

This study examined effects of accessible self-discrepancies on subjects' mood states and the effects of these mood states on compliance. Two affective states, agitation and dejection, were induced in 115 college students by priming their available self-discrepancies. After the subjects had received specific primes and their mood states had been assessed, they were exposed to a compliance paradigm and their responses were observed. It was found that: (1) experimental self-discrepancy priming increased general emotional discomfort among high self-discrepant subjects; (2) discriminating effect of specific priming conditions failed to occur; and (3) in extreme cases, dejection-related mood state was uniquely related to an increase in the likelihood of compliance with a request to help another experimenter, whereas, in contrast, agitation-related mood state tended to be uniquely related to a decrease in the likelihood of compliance. Furthermore, a suppressing effect of mirror manipulation on negative affect was observed. The implications of these findings are discussed within the framework of Higgins' "Theory of Self-Discrepancy" (in press), a theory encompassing both emotions and cognitive self-discrepancies. It is suggested that the results of the study indirectly support the assertion that the type of emotions mediates between cognitive self-discrepancies and compliance. In addition to the study, developments in psychology related to the area of prosocial, or helping or altruistic, behavior are discussed. (Author/NB)

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ABSTRACT

Self-Discrepancies, Negative Mood States,
and Compliance

Roman D. Thein

Effects of accessible self-discrepancies on subjects' mood states and the effects of these mood states on compliance were examined in the present study. In the experiment, two affective states --agitation and dejection-- were induced in 115 subjects by priming their available self-discrepancies. After the subjects had received specific primes and their mood states had been assessed, they were exposed to a compliance paradigm and their responses were observed. It was found that (1) the experimental self-discrepancy priming increased general emotional discomfort among high self-discrepant subjects; (2) discriminating effect of specific priming conditions failed to occur; and (3) in extreme cases, dejection-related mood state was uniquely related to an increase in the likelihood of compliance with a request to help another experimenter, whereas, in contrast, agitation-related mood state tended to be uniquely related to a decrease in the likelihood of

compliance. Furthermore, a suppressing effect of mirror manipulation on negative affect was observed. The implications of these findings are discussed within the framework of Higgins' (in press) Theory of Self-Discrepancy: a theory encompassing both emotions and cognitive self-discrepancies. It is suggested that the results of this study indirectly support the assertion that the type of emotions mediates between cognitive self-discrepancies and compliance.

In addition to the actual study, developments in psychology related to the area of prosocial --or helping and altruistic-- behavior are discussed.

The scope of this paper does not allow to discuss in depth the issue of cognitive vs. affective primacy. But it can be asserted that affective responses are rapid, and may involve cognitive appraisal of which we are marginally aware (Lazarus, 1982; Zajonc, 1980; Isen; 1984). They are probably the quickest responses to situations necessitating prosocial behavior (Gaertner & Dovidio, 1977; Piliavin, Piliavin, & Rodin, 1975; Clark & Ward, 1974; Piliavin, Rodin, & Piliavin, 1969). Thus, emotions must not be neglected in any psychological theory of prosocial behavior.

In general, the research on the effects of negative affect on prosocial behavior is quite complex (Barden, Garber, Duncan, & Masters, 1981; Shelton & Rogers, 1981). Some studies (e.g., Cialdini, Darby, & Vincent, 1973; Konecni, 1972; Carlsmith & Gross, 1969; Freedman, Wallington, & Bless, 1967) have shown increased likelihoods of subjects' engaging in prosocial behavior associated with negative emotions. Other studies (e.g., Moore, Underwood, & Rosenhan, 1973; Isen, Horn, & Rosenhan, 1973) have shown either no effects, or non-significant decreases in prosocial behavior associated with negative feelings. Thompson, Cowan, and Rosenhan (1980) assert that these conflicting results were caused, among other things, by the subjects' differential focus of attention in various studies. Thus, Thompson, et.al. (1980) had their subjects focus either on their friends' imaginary feelings about their misfortunes (terminal illness), or on the subjects' own feelings resulting from

imagining their friends terminally ill. As subjects' concentrated on the feelings of others, they became motivated to reduce their unpleasant empathic response by some prosocial activity, i.e., helping. Self-focused subjects presumably could not find problems of others rewarding. Their concerns were turned inward. Thompson, et.al., (1980) found this hypothesis supported: other-focused subjects helped more.

Self-focused subjects, however, do not necessarily have to be less helpful. In one of the experiments reported by Gibbons and Wicklund (1982) subjects whose attention was directed toward themselves by the presence of a mirror were --under specific conditions-- more likely to help than subjects whose attention was not self-directed. In this particular experiment the subjects were rating the "funniness" of cartoons. In one condition the subjects were "overpaid" for their "work"; in another they were "underpaid." The group of subjects who were both overpaid and self-aware (self-focused) had the highest helping response. Gibbons and Wicklund (1982) argue in the light of Self-Awareness Theory that self-focus manipulation among people who suffer all kinds of anxieties and worries inhibits prosocial behavior: their interests are, as in Thompson's, et.al. (1980) study, turned inward. Only if certain conditions are met, such as increased "situational salience of a helping norm," the self-aware person will focus on the helping aspect of the self and will be more likely to help.

According to Duval and Wicklund's (West & Wicklund, 1980) and Carver and Scheier's (Scheier & Carver, 1983; Carver & Scheier, 1982) theories involving self-directed attention, self-focus increases conformity to situationally salient norms. Thus the presence of salient "helping norms" should, indeed, increase helping for self-aware subjects. Gibbons and Wicklund, in the above mentioned article, report a number of experiments in which subjects under the conditions of both heightened "helping norm" salience and self-awareness were more likely to help.

However, a question remains: why should self-focus increase conformity? According to both theories, self-focus increases a self-evaluative process in which the current state of the individual is compared to some evaluative standard. If a discrepancy is found between these two, an aversive drive state results that consequently motivates a specific behavior intended to reduce the gap. The situational salience of various standards determines which particular standard will be used and which particular behavior will ensue. Scheier and Carver (1983) point out that even though this evaluative process was previously taken for granted, their evidence suggests that the evaluative process does take place in self-focused subjects: self-aware people seek out more normative information than unfocused people. It should be noted that discrepancies discussed by Carver and Scheier (1982) are general discrepancies between current states and desired goals. In the context of this

proposal, specific, chronic self-discrepancies will be discussed. Hence, this study will examine individual differences among people in their discrepancies and the different emotions and motivational drives associated with them.

Self-Discrepancy Theory

Higgins' (in press) Self-Discrepancy Theory addresses problems related to those discussed by Self-Awareness Theory. Higgins asserts that people have multiple self-state representations. These self-state representations are mental representations of the personal attributes that someone believes the individual either actually possesses, would like to possess, or believes it is his or her obligation to possess. These various personal attributes are parts of the person's accessible self-knowledge. Two cognitive dimensions determine self-state representations: domains of the self, and standpoints of the self. Three domains of the self can be distinguished as 1) the actual self-attributes people believe they actually possess, 2) the ideal self-attributes people desire to possess, and 3) the ought self-attributes people believe they have an obligation to possess. The standpoints of the self refer to the person's representations of who is making the attribution: is it the person's own standpoint or the standpoint of the person's significant other such as mother's, father's, boyfriend's, etc... Higgins further asserts that if the various self-state representations are discrepant with each other and these

discrepancies are made highly accessible, the individual will experience various discomforting emotions. These negative emotions will vary in both intensity and quality. Moreover, changes in the accessibility of a person's self-discrepancies could be effected by focusing the person's attention on him or herself. Hence, self-focus should affect the accessibility of the particular self-discrepancy, thus changing the intensity and type of the person's emotional state. Studies by Higgins, Klein, and Strauman (1985) and Higgins, Bond, Klein, & Strauman (1986a) support these assertions. In all of these studies, subjects' discrepancies were assessed by the method described in Higgins (in press). In the Higgins,' et.al. (1985) study the subjects were given questionnaires designed to measure chronic negative emotions and emotional symptoms (Beck Depression Inventory, Hopkins Symptom Checklist, Depression and Anxiety Subscales, Emotions Questionnaire, Sum of Negative Emotions). Significant positive relationships between the magnitudes of total self-discrepancies and the intensities of general discomfort were found on all scales. In other studies, significant correlations were found between subjects' discrepancies and various items in the depression, anxiety, and phobic subscales of Hopkins Symptom Checklist and the Emotions questionnaire. The results generally supported predictions of distinct emotions based on clinical observations and reports (see, Higgins, in press).

If ideal and ought self-concepts are perceived as

standards and values, then their violations will produce unpleasant emotional states. Additionally, these emotional states will differ depending on which particular standard was violated. Higgins, et.al. (1986a) found that accessibilities of discrepancies can be manipulated by focusing on one particular discrepancy as opposed to focusing on another. In the same study, Higgins and his associates combined subjects' scores on the Selves Questionnaire in such a way that each subject had only two scores. The first score was on Actual Own/Ideal Own + Other discrepancy, the second score was on Actual Own/ Ought Own + Other discrepancy. Then they selected subjects who had either high scores on both discrepancies or low on both. This combination of scores reflected specific types of negative psychological situations. Ideal discrepancies represent the "absence of positive outcomes" and were supposed to be related to dejection, whereas Ought discrepancies represent the "presence of negative outcomes" and were supposed to be related to agitation (Higgins, in press). According to previous findings, and according to the theory, it was expected that subjects who were high on both Ideal and Ought discrepancies would experience feelings of dejection when primed for their Ideal standards. If Ought standards were made accessible, the subjects were expected to experience agitation. And, indeed, these results were found on both paper and pencil, and behavioral measures. The subjects' agitation or dejection increased with the appropriate

manipulation. Furthermore, those subjects who were low on both discrepancies felt less dejected and less agitated after the manipulation than before; they experienced mild positive mood due to their low discrepancies.

Thus, it appears that activation of self-discrepancies is the most optimal way of testing the effects of both "negative" and "positive" emotions on prosocial behavior. Not only does Self-Discrepancy Theory incorporate previous theories of the relationships between self-concepts and emotions (e.g., Rogers, 1961; Horney, 1950; etc...), but it may also provide the link between people's perceived self-states and their prosocial behavior. Moreover, a careful selection of subjects based on their discrepancies offers a control of subjects' emotional vulnerabilities, thus giving the researcher full control over emotion inducing situations. In addition, if Higgins' theory is used in a prosocial behavior study, the results will increase our knowledge of motivational factors associated with self-states.

Experiment

Method

Design

Two groups of subjects (high ideal and high ought self-discrepancies; and low ideal and low ought self-discrepancies) were exposed to one of three types of priming (thinking and writing about their goals and wishes; thinking and writing about their obligations; no priming) with one of two levels of objective self-awareness (mirror; no mirror).

The subjects' agitation and dejection scores on the post-manipulation affect measure were related to compliance after the pre-manipulation negative affect was partialled out.

Thus, the study was a 2 x 3 x 2 between-subjects design with two levels of subjects' self-discrepancies (High Ideal and High Ought vs. Low Ideal and Low Ought), three levels of priming (Ideal Prime vs. Ought Prime vs. No Prime), and two levels of self-awareness (Mirror Present vs. Mirror Absent).

Independent Variables

Three primary and three secondary independent variables were studied.

Primary independent variables:

1) Discrepancy. Subjects' self-discrepancy scores were determined by the subjects' scores on the Selves Questionnaire administered approximately 6 weeks before the experiment and described in Higgins (in press). The subjects were then assigned to two experimental groups (High vs. Low Discrepant), if their scores on Actual Own/Ideal Own + Other and Actual Own/Ought Own + Other variables were either both positive or both negative, respectively (see, Subjects section).

2) Prime. Priming manipulation was accomplished by asking people to think and write about their goals and wishes (Ideal Prime), or about their duties and obligations (Ought Prime). In the priming control condition the subjects received only the affect measures (No Prime; for further details, see Questionnaire section).

3) Mirror. Objective self-awareness was manipulated by the presence or absence of a mirror on the subjects' desks while they responded to their questionnaires (Mirror Present vs. Mirror Absent; see, Mirror section).

Secondary independent variables:

1) Agitation. Subjects' levels of agitation-related mood were defined as subjects' mean responses on 11 dichotomous items (afraid, agitated, desperate, frightened, quiet, reckless, timid, vexed and, reversed for scoring, calm, free, and mild) on the Multiple Affect Adjective Checklist (see, Questionnaire section) previously employed to establish subjects' level of agitation by Higgins, et.al. (1986a). They were multiplied by 100, and used as indicators of subjects' agitation-related mood states. These items were selected as distinctly agitation related based on clinical research, factor analysis, cluster analysis, and circular scaling (Ausubel, 1955; Bibring, 1953; Cattel, 1973; DeRivera, 1977, Ewert, 1970; Russell, 1980; Kemper, 1978; Zuckerman & Lubin, 1965; reported in Higgins, in press).

2) Dejection. Subjects' levels of dejection-related mood were defined as subjects' mean responses on 9 dichotomous items (blue, discontented, discouraged, displeased, lonely, low, sad, unhappy, and reversed for scoring, satisfied) on the Multiple Affect Adjective Checklist previously utilized by Higgins, et.al. (1986a). They were multiplied by 100 and used in the current study as indicators of dejection related mood states. Again, these items have been reported as

forming a distinct cluster of emotions (e.g., Cattel, 1973; DeRivera, 1977; Ewert, 1970, Kemper, 1978, Zuckerman & Lubin, 1965; reported in Higgins, in press).

To further validate the use of the agitation and dejection scales, a factor analysis was performed with actual scores obtained in the current study on the 20 agitation- and dejection-related items for the current set of data. Except for two items that loaded on both factors and two items that loaded on a wrong factor, all items loaded correctly on two distinct factors. Moreover, Higgins', et.al. (1986a) agitation and dejection measures employed in the current study were used to compute subjects' means in each one of the 12 experimental conditions. These means were rank-ordered within each variable and then correlated with rank-ordered means derived from new Anxiety and Depression Scales described by Zuckerman, Lubin, & Rinck (1983). The results were as follows: agitation with anxiety: Spearman r = 0.67, p = 0.01, N = 12; dejection with depression: Spearman r = 0.93, p = 0.0001, N = 12. Thus, the use of Higgins', et.al. (1986a) agitation and dejection indices seems valid.

3) General Negative Mood. Subjects' levels of general negative mood were defined as the means of subjects' responses on all 20 agitation- and dejection-related items on the Multiple Affect Affective Checklist multiplied by 100.

Dependent Variables

General negative mood, agitation, and dejection scores were studied in Hypotheses (1) and (2) as dependent variables

and as such they might be thought of as manipulation checks. In Hypothesis (3), however, these variables served as predictors. Thus, their role in this study is dual and they appear among both independent and dependent variables. Hence, there were four dependent variables:

1) subject's level of agitation-related mood (see above, secondary independent variables).

2) subject's level of dejection-related mood (see above, secondary independent variables).

3) subject's level of general negative mood (see above, secondary independent variables)

4) compliance. Compliance was defined as subjects' consenting or dissenting to a request to help another researcher with preparation of stimulus material for a study. This compliance variable was in agreement with variables usually used in compliance paradigms in which subjects are asked to do a favor for some other experimenter. This variable was originally designed as a continuous time-measure. Subjects were asked how much time in minutes they would like to spend helping another "experimenter." The subjects who already committed themselves to helping, however, always offered as much time as the "experimenter" needed. Thus, this variable became a dichotomous response variable: help vs. no help. This had a major impact on the way the data were analyzed in this study.

Furthermore, to avoid any ceiling or floor effects approximately 10 sessions were devoted to "tuning up" the

exact formulation of the request and to the set up of the experimental room.

Premanipulation affective state

Sums of subjects' responses on the Semantic Differential with reversed positive scales were used to establish subjects' negative mood prior to the manipulation. The task involved responding on 6 scales. All of these were 7-point scales with the following extremes: interested vs. bored, loud vs. dull, happy vs. sad, alert vs. tired, fast vs. slow, and strong vs. weak. The subjects were asked to describe their current feelings on these 7 point continua between the extremes by circling a number between 1 and 7.

To ascertain that no systematic error took place in the random assignment of subjects to their respective experimental conditions a 2 x 3 x 2 (see, Design section) analysis of variance was computed on subjects' responses to this task as the dependent variable. No significant differences were observed. This variable was then used for a statistical removal of the variance of pre-manipulation negative affect from the variance of compliance.

Subjects

One hundred and fifteen New York University male and female undergraduate college students participated in this study to complete their laboratory requirements in Introductory Psychology course. Fifty nine of these students were selected for their negative scores on both Actual Own/Ideal Own + Other and Actual Own/Ought Own + Other

discrepancy score on the Selves Questionnaire and 56 students were selected for their positive scores on both Actual Own/Ideal Own + Other and Actual Own/Ought Own + Other scores on the same questionnaire. This was not accomplished by using tertiary splits as in Higgins, et.al. (1986a), but by creating a cross-product between Actual Own/Ideal Own + Other and Actual Own/Ought Own + Other variables and by selecting only subjects with positive scores on this product. The subjects were then categorized as either low discrepant or high discrepant depending on whether their scores on the two discrepancy variables were both negative or both positive, respectively. Thus, these subjects were not necessarily extremely discrepant.

Apparatus and Materials

Questionnaire. The stimulus material for this study were photo-copied booklets in a questionnaire form containing the initial negative affect measure (Semantic Differential), priming text specific for each priming condition (no text in No Prime condition), and finally post-manipulation affect measure (Multiple Affect Adjective Checklist; Zuckerman and Lubin, 1965). The priming text consisted of 4 questions pertaining either to the subjects' or their parents' goals and wishes (Ideal Prime condition), or to their own or their parents' duties and obligations (Ought Prime condition). In the Ideal Prime condition the subjects were asked to write down what kind of person they and their parents wished they would ideally like to be, the attributes that they and their

parents wished them to have, and how this has changed over the years. In the Ought Prime condition the subjects were asked to write down what kind of person both they and their parents think they have an obligation to be, the attributes both they and their parents think they ought to have, and how this has changed over the years. In the Prime Absent condition the subjects received only pre-and post-manipulation affect measures. Subjects were randomly assign to their particular priming and self-awareness experimental condition.

Mirror. An approximately 17" x 22" Woolworth brand mirror with a sign "DR. ROBERTSON'S 'LIGHT' EXPERIMENT. PLEASE DO NOT MOVE OR TOUCH!" attached to it was placed on the desk in the experimental room. The mirror faced either the subject or the wall depending on the experimental condition the subject was randomly assigned to.

Experimental room. A small isolated room with a large writing desk, chair, and a desk lamp was used.

Procedure

All subjects, whose experimental conditions or discrepancy status --except for the mirror manipulation-- were unknown to the experimenter, were individually shown to the experimental room, seated and handed numbered envelopes containing the versions of the questionnaire appropriate to the priming condition they were assigned to. The experimenter then left the subjects in the room alone for periods of 10 to 15 minutes or for as long as the subjects

needed to fill out the questionnaire. This procedure was accomplished by assigning to the subjects code numbers that matched the code numbers on the envelopes.

As soon as the subjects finished filling out the questionnaire, they knocked or open the door and the experimenter reentered the room while putting on his jacket as if about to leave. He apologized for forgetting the other part of the questionnaire in the building next door, and for having to run out to fetch it. The subjects were then asked whether they would prefer to stay in the room, go to a "magazine room," or go to the tenth floor to help another "experimenter" with proof-reading his stimulus material without a credit reward.

When the subjects responded that they would prefer to stay in the room or go to the "magazine room," the experiment was terminated and the subjects' responses were recorded. If the subjects decided to help the other "experimenter," they were asked how much time they were willing to spent proof-reading. The subjects' responses to both questions, i.e., help/no help and time offered to help, were recorded and the sessions were terminated. Afterwards, both 'helping' and 'non-helping' subjects were fully debriefed and subjected to Velten's (as in Natale & Hantas, 1982) positive mood induction.

Results

Hypothesis (1): Does increased accessibility of self-discrepancies increase emotional discomfort? As indicated by

the multivariate analysis of variance of agitated and dejected mood states as dependent variables and with Discrepancy and Prime as independent variables, it is indeed so. Priming of self-discrepancies among high discrepant subjects increased the subjects' general emotional discomfort. The overall between-subjects interaction effect of Discrepancy x Prime for the Mirror Absent condition was significant, F (2, 50) = 3.37, p < 0.05. In addition, the main effect of Prime showed an overall trend in predicting both agitation and dejection, F (2, 50) = 2.90, p = 0.06. Univariate test of Discrepancy x Prime interaction effect was significant for dejection, F (2, 50) = 3.27, p < 0.05, and borderline significant for agitation, F (2, 50) = 2.45, p = .097.

As is evident from Table 1, both Ideal and Ought Prime conditions show elevated scores on general negative mood for high discrepant subjects with Ought Priming being the highest. Hence, another multivariate analysis of the mood states, this time with Prime variable dummy-coded into two Ideal Prime and Ought Prime variables was performed. The overall effect of Discrepancy x Ideal Prime interaction was not significant. The overall effect of Discrepancy x Ought Prime interaction, on the other hand, was clearly significant, F (1, 50) = 6.00, p = .018. Moreover, the main effect of Ought Prime was significant, F (1, 50) = 5.80, p < 0.05. On the univariate tests, the Discrepancy x Ought Prime interaction was significant for both agitation, F (1, 50) =

4.84, $p = 0.03$; and dejection: F (1, 50) = 4.37, $p < 0.05$.

Hypothesis (2): Does priming of specific self-discrepancies lead to distinct affective states? The answer to this question lies in a multiple regression analysis in which the two affective states --agitation and dejection--are treated as repeated measures. In this analysis, tests of individual hypotheses for within-subjects effects examine the differences between the individual subjects' agitation and dejection scores and the association of these differences with the subjects' levels of Discrepancy, types of Prime, and the interaction of both. If Hypothesis (2) were to be supported, then a significant Type of Discomfort (i.e., differences between agitation and dejection scores) x Discrepancy x Prime interaction would be found. This was not the case; the crucial interaction term was not significant, F (2, 50) = 1.88, $p = 0.16$. Therefore, the results of this study failed to replicate the discriminating effects of specific types of priming on specific types of discomfort.

To ascertain that my randomizing procedures were correct and that the above failure to replicate previous findings was not caused by some systematic error in the subjects' random assignment, subjects means on the discrepancy variables in each experimental condition were analyzed for any significant differences. The magnitudes of Actual Own/Ideal Own + Other and Actual Own/Ought Own + Other variables' means did not differ significantly from each other and these were the two variables that determined the

subjects' assignments to low or high discrepant groups.

Nevertheless, as indicated in the Subjects section, the two samples of high and low discrepant subjects did not consist of only extremely discrepant subjects. The subjects were selected and assigned to these two groups because both of their discrepancy scores were either positive or negative. Therefore, it is possible that the presence of subjects whose discrepancies were not truly extreme introduced a large error variance to the scores and thus reduced the probability of confirming Hypothesis (2).

Hypothesis (3). Do specific mood states have differential effects on the subjects' compliance? Consistent with Hypothesis (1), the priming manipulation increased both dejection and agitation especially among high discrepant subjects. Hypothesis (3) asked if these two mood states -- -agitation and dejection-- had differential effects on compliance. To test this, subjects' scores on dejection, agitation, and premanipulation negative affect variables from all experimental conditions were simultaneously entered as predictors into a multiple regression equation. Considering that a non-clinical population was used in this study and that most of the subjects' discrepancies were not truly extreme, it was expected that dejected subjects experienced only a mild sadness and that agitated subjects felt only mild apprehension (yet their scores were normally distributed; kurtosis: agitation = 0.20 , dejection = -0.03; skewness: agitation = 0.74, dejection = 0.97). To better test

Hypothesis (3), then, only those subjects who scored in the highest or lowest quartiles of their agitation and dejection scores' statistical distributions were selected for these analyses.

As shown in Table 2, the results were as follows: when premanipulation negative affect was not included among the predictors, the omnibus test was significant, F (2, 35) = 3.65, $p < 0.05$ (R-square = 0.17): dejection significantly increased the probability of compliance, t (35) = 2.60; p = 0.014, and agitation tended to decrease the probability of compliance, t (35) = -1.76, p = 0.087.

When pre-manipulation negative affect was entered to account for its variance and to observe "pure" post-manipulation agitation and dejection effects, the pattern of results remained basically the same (see Table 3). The omnibus test was now borderline significant, F (3, 34) = 2.41, p = 0.08, the effect of dejection was still significant, t (34) = 2.40, p = .02, and the same tendency was found for agitation, t (34) = -1.76, p = 0.086. Increment in R-square associated with the inclusion of pre-manipulation negative affect was approximately 0.001 and negligible.

A test of the difference between agitation and dejection regression coefficients was significant, F (1, 35) = 5.17, $p < 0.05$. Therefore, Hypothesis (3) was supported.

To see, if similar effects can be found when compliance is regressed on subjects' general negative mood scores, two

regression analyses were performed: (1) with general negative mood as the only predictor and (2) with both pre-manipulation negative affect and general negative mood. Both analyses were, as could be expected on the basis of the contrasting effects of agitation and dejection variables, non-significant for all predictors, (1) t (36) = 1.31, p = 0.20; (2) t (35) = 0.81, p = 0.42.

Mirror Effects. The Mirror variable, although included in the design, has not been previously discussed due to its only tangential relationship to Hypotheses (1) through (3). Nevertheless, to test this variable's effects an analysis of variance was performed for agitation, dejection, and general negative mood as dependent variables and Discrepancy, Prime, and Mirror as predictors simultaneously entered. The overall test of this model for agitation was not significant, F (11, 103) = 1.18, p = 0.31, and none of the predictors including Mirror manipulation was significantly related to agitation. A triple interaction Discrepancy x Prime x Mirror was a borderline significant, F (2, 103) = 2.32, p = 0.10, indicating that opposite types of mild interactions were occurring in the two mirror conditions. Basically, the Mirror Present manipulation tended to decrease agitation among high discrepant primed subjects, and increase agitation among high discrepant unprimed subjects. The reverse was true for Mirror Absent conditions. This trend did not appear in the analysis of variance of dejection and when pre-manipulation effect was simultaneously entered into the

equation the triple interaction's effects vanished from agitation analysis. Similarly, the analysis of general negative mood was non-significant for the overall model, F (11, 103) = 1.41, p = 0.18, and none of the predictors including Mirror variable were significant.

Despite these results a t-test for the major effect of Mirror was performed and found to be non-significant. Both agitation and dejection means, however, indicated higher affect scores in Mirror Absent than in Mirror Present condition. Therefore, to test whether this emotion suppressing effect can be found among high discrepant subjects who were most responsive to the priming manipulation, an analysis of variance was computed with general negative mood as the dependent variable and Prime (coded Prime Present vs. Prime Absent) and Mirror as the independent variables. The Prime x Mirror interaction was, as expected, borderline significant, F (1, 52) = 3.97, p = 0.052 (see Table 3). As shown in Table 3, for high discrepant subjects who were primed for their self-discrepancies, the presence of the mirror suppressed the effect of priming on increasing general negative mood states.

Discussion

Can cognitive concepts affect prosocial behavior? As shown in the results of this study, cognitive concepts such as self-discrepancies can be indirectly linked to prosocial behavior. A number of findings support this assertion.

First, a link between self-discrepancies and negative

mood states was found. Despite the failure to induce specific emotions with specific types of priming, subjects did experience both agitation- and dejection-related mood states as a result of manipulating the accessibility of their self-discrepancies.

Second, specific relationships between types of emotions --agitation and dejection-- and compliance were found. This second, basic finding supported the major hypothesis of this paper. Emotions induced by manipulating accessibilities of cognitive self-discrepancies can be linked to increased or decreased compliance. This may be considered contradictory to previous evidence concerning agitation and anxiety, and dejection and depression. Dejected people are, after all, expected to have "no interest in things" and to feel "hopeless about future," whereas agitated people should feel "restless, they couldn't sit still" and "tense or keyed-up." (Higgins, in press). Thus, dejected people could be expected to decline to help, because they might perceive getting up and going to another floor too effortful. Agitated people could be expected to help in order to attempt to escape their restlessness.

Despite the fact that dejected and agitated people frequently report these feelings, the present findings seem to support Higgins' (in press) Self-Discrepancy Theory. In Chapter 5, Ideal and Ought discrepancies were described as representing two different types of negative psychological situations stored in long term memory and behaving as

psychological constructs. As such, they may be subject to temporary increases in relative accessibility (Higgins & King, 1981; Wyer & Srull, 1981) through priming manipulations. In the current experiment, priming successfully increased the momentary accessibility of available self-discrepancies, which in turn induced discomfort. The present design and the type of data obtained did not allow for concluding that priming of specific discrepancies led to differential compliance responses via specific negative mood. As the analyses were performed in two separate stages, it cannot be asserted, without additional data, that the proposed model was indeed confirmed. Yet, because the pattern of the present results is in accord with Hypotheses (1) and (3), the implications of compliance mediated by only specific affects can be discussed.

Hence, it is possible that an increase in the accessibility of the "presence of negative outcomes" decreased subjects' compliance, whereas an increase in the accessibility of "absence of positive outcomes" increased it. Is there any reason to believe that the effects of these constructs should differ so widely? Indeed, there is. It would not be correct to conclude that all discrepancies between observed, actual states and perceived salient standards --when made accessible-- should be thought of as motivating people to reduce the gap by conforming to some salient standard as objective self-awareness and control

theories would predict (e.g., Scheier & Carver, 1983; Carver & Scheier, 1982; West & Wicklund, 1980). As the present findings seem to indicate, discrepancies differ in their motivational aspects. If only general negative affect is used as a predictor of compliance, no successful prediction is possible. However, feeling mildly "disappointed," "lonely," or "sad" (i.e., dejected states) seems much less threatening than feeling "afraid," "frightened," or "timid" (agitated states). In addition, Higgins (in press) reports that Ideal discrepancies are related to "frustration from unfulfilled desires" and with "a concern over a loss of others' affection or esteem." Whereas Ought discrepancies are related to a perceived "lack of character or weakness" and to "feelings of resentment of the anticipated pain to be inflicted by others" (italics added by R.D.T.). The dichotomy between the motivational natures of these two groups of discrepancies is clear. Ideal discrepant people, when their discrepancies are made accessible, may be concerned with achieving their hopes and, especially, with conformity to others in order to maintain high esteem in others' eyes. Ought discrepancies, when accessible, produce self-criticism, and, especially, resentment of pain to come from others. Thus, it would not be at all surprising if subjects whose "absence of positive outcomes" were primed and who, therefore, experienced mild dejection, were more likely to help than subjects whose "presence of negative outcomes" were primed and who, hence, experienced mild agitation.

Resentment of others' anticipated actions can hardly be conducive to benign helpfulness. Following the same reasoning, it would not be surprizing if subjects motivated to conform out of a concern for their esteem in the eyes of others went out of their way to comply with a request for a minor favor while waiting for the experimenter.

Thus, the present findings are generally consistent with Self-Discrepancy Theory. Moreover, these findings offer a partial support to Nisan's (1984) notion of moral content: standards and values were found to be important for acting in a prosocial way. However, an assumption that a mere activation of a prosocial standard will activate an affective response and, thus, increase a motivation to act prosocially may not be justified. As the present study demonstrates, not all standards will produce negative affects. Only standards that are discrepant from a perceived actual state are related to an increment in negative affect, and only specific types of negative affect will increase the likelihood of help. Only when we perceive specific deficits in ourselves can our standards related to these specific deficits move us.

This result has important implications for studies relating negative affect and compliance. As stated earlier, negative emotions, when used as predictors in prosocial behavior studies, have frequently had contradictory effects (e.g., Thompson, et.al., 1980; Moore, et.al., 1973, Isen, et.al., 1973; Cialdini, et.al., 1973; Carlsmith & Gross, 1969; Freedman, et.al., 1967). The present study has shown

that specific types of emotions have different effects on prosocial behavior. Agitation tends to be uniquely related to a decrease in compliance, whereas dejection is related to an increase in compliance. Moreover, general negative mood state is unrelated to compliance. Hence, it is very likely that various experimental manipulations of negative affect in previous research, in some instances, triggered more agitation-related affective states among most of the subjects, and in others more dejection-related affective states. Thus, some studies found decrements in compliance associated with negative affect, whereas others found increments. Moreover, in studies where agitation- and dejection-related affective states were equally induced, the likelihood of the subjects' compliance was unrelated to mood manipulation.

Most importanly, my findings appear to be consistent with the Negative State Relief Model proposed by Cialdini and his associates (Cialdini, Kenrick, & Baumann, 1982). According to this model, adult subjects experiencing a distinct negative mood state --sadness-- are more likely to help, because, for adults, the reduction of this negative state is self-rewarding. The authors of this model, however, remark that only specific negative states have help-promoting properties. Anger, for example, is not supposed to promote help. In the present study, agitation-related mood states, such as being agitated, reckless, and especially vexed and --reversed--mild (items on agitation measure), seem to be akin

to anger. Dejection-related mood states, such as feeling sad, blue, and low (items on dejection measure), seem identical to feelings of sadness. Thus, it is seems that the findings of the current study are in accord with Cialdini's, et. al. (1982) model. Since anger is supposed to be unrelated to prosocial behavior, agitated subjects in the present study were found to be less likely to comply; and since sadness is supposed to increase prosocial behavior, dejected subjects were found to be more likely to comply.

The present study also found that primed high discrepant subjects in the Mirror Present condition reported a lesser degree of negative affective states than primed high discrepant subjects in Mirror Absent condition. A similar suppression effect was found in a study by Higgins, et.al. (1986b) as well. The subjects in their study, who were exposed to both a mirror and camera, performed so rapidly on a Stroop task as if they had blocked out all distractions, even when primed for their discrepancies. Subjects who did not receive a self-awareness manipulations showed delays on Stroop performance when primed for their discrepancies. A number of questions can then be asked concerning how controlled or automatic the inhibition process is, how aware the subjects are of this process, and whether this process applies only to negative affect-producing conditions or to positive as well. At this point, based on the experimental design and results of the Higgins, et.al. (1986b) study, it appears that this phenomenon is not controlled and applies

only to negative affect-producing situations. Nevertheless, the question of automaticity in the inhibitory process should be explored more fully in an experimental design that utilizes stringent definitions of automatic processes (see, Bargh & Thein, 1985; or Bargh, 1984).

In summary, general developments in psychology related to ethical behavior were described. Based on these previous insights, it was concluded that both cognitions and affect are important and complementary elements of prosocial behavior. Self-Discrepancy Theory offered an alternative way of studying this phenomenon. Although the results of this study did not demonstrate direct causal linkages across self-discrepancies, negative affect, and compliance, they did show a relationship between self-discrepancies and prosocial behavior indirectly via two obtained relationships --between primed self-discrepancies and negative affect and between type of negative affect and tendency to comply.

A relationship between objective self-awareness and negative affective states was also explored, and the presence of a mirror was found to suppress the effect of priming on high discrepant subjects' negative mood. Thus, further research studying the relationships more in depth is clearly needed and promises to be fruitful.

References

Ausubel, D.P. (1955). Relationships between shame and guilt in the socializing process. Psychological Review, 62, 378-390.

Barden, R.D., Garber, J., Duncan, S.W., & Masters, J.C. (1981). Cummulative effects of induced affective states in children: Accentuation, inocculation, remediation. Journal of Personality and Social Psychology, 40, 750-760.

Bargh, J.A. (1984). Automatic and conscious processing of social information. In R.S. Wyer, Jr. & T.K. Srull (Eds.), Handbook of social cognition (Vol. 3). Hillsdale, NJ: Erlbaum.

Bargh, J.A. & Thein, R.D. (1985). Individual construct accessibility, person memory, and the recall-judgment link: The case of information overload. Journal of Personality and Social Psychology, 49, 1129-1146.

Bibring, E. (1953). The mechanism of depression. In P. Greenacre (Ed.), Affective disorders. New York: International Universities Press.

Carlsmith, J.M., & Gross, A. (1969). Some effects of guilt on compliance. Journal of Personality and Social Psychology, 11, 240-244.

Carver, C.S. & Scheier, M.F. (1982). Control theory: A useful conceptual framework for personality-social, clinical, and health psychology. Psychological

Bulletin, 92, 111-135.

Cattel, R.B. (1973). Personality and mood by questionnaire. San Francisco, CA: Jossey-Bass.

Cialdini, R., Darby, B., & Vincent, J. (1973). Transgression and altruism: A case for hedonism. Journal of Experimental Social Psychology, 9, 502-516.

Cialdini, R.B., Kenrick, D.T., & Baumann, D.J. (1982). Effects of mood on prosocial behavior in children and adults. In N. Eisenberg (Ed.), The development of prosocial behavior. New York, NY: Academic Press.

Clark, R.D., & Ward, L.E. (1974). Where is the apathetic bystander? Situational characteristics of the emergency. Journal of Personality and Social Psychology, 29, 279-287.

DeRivera, J. (1977). A structural theory of the emotions. Psychological Issues, Vol. 10, Number 4, Monograph 40.

Ewert, O. (1970). The attitudinal character of emotion. In M.B. Arnold (Ed.), Feelings and emotions: The Loyola symposium. New York: Academic Press.

Freedman, J.L., Wallington, S.A., & Bless, E. (1967). Compliance without pressure: The effect of guilt. Journal of Personality and Social Psychology, 7, 117-124.

Gaertner, S.L., & Dovidio, J.F. (1977). The subtlety of white racism, arousal, and helping behavior. Journal of Personality and Social Psychology, 35, 691-707.

Gibbons, F.X., & Wicklund, R.A. (1982). Self-focused

attention and helping behavior. Journal of Personality and Social Psychology, 43, 462-474.

Higgins, E.T. (in press). Self-discrepancy: A theory relating self and affect. Psychological Review.

Higgins, E.T., Bond, R., Klein, R., & Strauman, T. (1986a). Self-discrepancies and emotional vulnerability: How magnitude, type, and accessibility influence affect. Journal of Personality and Social Psychology, 51, 5-15.

Higgins, E.T. & King, G. (1981). Accessibility of social constructs: Information-processing consequences of individual and contextual variability. In N. Cantor & J.F. Kihlstrom (Eds.), Personality, cognition, and social interaction. Hillsdale, NJ: Erlbaum.

Higgins, E.T., Klein, R., & Strauman, T.J. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. Social Cognition, 3, 51-76.

Higgins, E.T., Van Hook, E., & Dorfman, D. (1986b). Is the self-concept a cognitive structure? Distinguishing between problematic and non-problematic self-attributes. Unpublished manuscript, Department of Psychology, New York University.

Horney, K. (1950). Neurosis and human growth. New York: W.W. Norton & Co.

Isen, A.M. (1984). Toward understanding the role of affect in cognition. In R. Wyer & T. Srull (Eds.) Handbook of social cognition. Hillsdale, NJ: Erlbaum Ass.

Isen, A.M., Horn, N. & Rosenhan, D.L. (1973). Effects of success and failure on children's generosity. Journal of Personality and Social Psychology, 27, 239-247.

Kemper, T.D. (1978). A social interactional theory of emotions. New York: W.W. Norton.

Konecni, V.J. (1972). Some effects of guilt on compliance: A field replication. Journal of Personality and Social Psychology, 23, 30-32.

Lazarus, R.S. (1982). Thoughts on the relation between emotion and cognition. American Psychologist, 37, 1019-1024.

Moore, B.S., Underwood, B., & Rosenhan, D.L. (1973). Affect and altruism. Developmental Psychology, 8, 99-104.

Natale, M., & Hantas, M. (1982) Effect of temporary mood states on selective memory about self. Journal of Personality and Social Psychology, 42, 927-934.

Nisan, M. (1984). Content and structure in moral judgment: An integrative view. In W.M. Kurtines & J.L. Gewirtz (Eds.) Morality, moral behavior, and moral development. New York: Wiley and Sons.

Piliavin, J. M., Piliavin, J.A., & Rodin, J. (1975). Costs, diffusion, and the stigmatized victim. Journal of Personality and Social Psychology, 32, 429-438.

Piliavin, J.M., Rodin, J., & Piliavin, J.A. (1969). A good samaritanism: An underground phenomenon? Journal of Personality and Social Psychology, 13, 289-299.

Rogers, C.R. (1961). On becoming a person. Boston, MA:

Houghton Mifflin Co.

Russel, J.A. (1980). A circumplex model of affect. Journal of Personality and Social Psychology, 39, 1161-1178.

Scheier, M.F. & Carver, C.S. (1983). Self-directed attention and the comparison of self with standards. Journal of Experimental Social Psychology, 19, 205-222.

Shelton, M.L. & Rogers, R.W. (1981). Fear-arousing and empathy-arousing appeals to help: The pathos of persuasion. Journal of Applied Social Psychology, 11, 366-378.

Thompson, W.C., Cowan, C.L., & Rosenhan, D.L. (1980). Focus of attention mediates the impact of negative affect on altruism. Journal of Personality and Social Psychology, 38, 291-300.

West, S.G. & Wicklund, R.A. (1980). A primer of social psychological theories. Monterey, CA: Brooks/Cole Publ. Co.

Wyer, R.S., Jr. & Srull, T.K. (1981). Category accessibility: Some theoretical and empirical issues concerning the processing of social stimulus input. In E.T. Higgins, C.P. Herman, & M.P. Zanna (Eds.), Social cognition: The Ontario symposium (Vol. 1). Hillsdale, NJ: Erlbaum.

Zajonc, R.B. (1980). Feeling and thinking: Preferences need no inferences. American Psychologist, 35, 151-175.

Zuckerman, M. & Lubin, B. (1965). Manual for the Multiple Affect Adjective Checklist. San Diego, CA: Educational

and Industrial Testing Service.

Zuckerman, M., Lubin, B., & Rinck, C. (1983). Construction of new scales for the Multiple Affect Adjective Checklist. Journal of Behavioral Assessment, 3, 119-129.

Table 1

Mean Scores on General Negative Mood on Multiple Affect Adjective Checklist (20 Items) for Mirror Absent Conditions (x 100).

	Mirror Absent		
	Priming		
Self-Discrepancies	Ideal	Ought	Absent
HIGH/HIGH			
M	30.0	46.5	18.1
SD	14.6	23.3	13.9
N	9	10	8
LOW/LOW			
M	29.4	24.5	25.0
SD	15.5	18.6	18.7
N	9	10	10

Table 2

Standardized Regression Coefficients of Compliance and Extreme Agitation and Dejection With and Without Pre-Manipulation Negative Mood Partialled Out.

1) Without Pre-Manipulation Negative Mood Partialled Out

Type of Negative Mood	Compliance	Probability of t-test
AGITATION	-0.49	0.087
DEJECTION	0.72	0.014

2) With Pre-Manipulation Negative Mood Partialled Out

Type of Negative Mood	Compliance	Probability of t-test
AGITATION	-0.50	0.086
DEJECTION	0.70	0.02

NOTE: Variables extreme agitation and extreme dejection are coded 0/1 for Lowest/Highest quartiles of agitation and dejection; variable compliance is coded 0/1 for No Help/Help.

Table 3

Mean Scores on Negative Mood State for High Discrepant Subjects Only (Priming Coded as Prime Present vs. Prime Absent) x 100.

	Self-Awareness	
Priming	Mirror Present	Mirror Absent
Prime Present		
M	28.7	38.7
SD	18.1	20.9
N	19	19
Prime Absent		
M	30.0	18.1
SD	20.5	13.9
N	10	8